



## Legal and Technical Commission

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### Outcomes of the international workshop on polymetallic nodule resource classification held in Goa, India, from 13 to 17 October 2014

#### Note by the secretariat

1. In October 2014, the International Seabed Authority, in collaboration with the Ministry of Earth Sciences of India, convened an international workshop on polymetallic nodule resource classification. The workshop was held in Goa, India, from 13 to 17 October 2014. The workshop reviewed the work that was being undertaken by contractors for the exploration for polymetallic nodules in relation to the collection and classification of resource data and current practice in land-based mineral development, in particular national reporting standards for exploration results and resource classification.
2. About 40 experts, including representatives of contractors with the Authority and members of the Legal and Technical Commission, participated in the workshop. Representatives of contractors made presentations on the work that they had accomplished to date. Experts on land-based mineral resource classification from the Committee for Mineral Reserves International Reporting Standards and the United Nations Framework Classification for Reserves/Resources: Solid Fuels and Mineral Commodities also made presentations on the existing classification systems. All presentations are available on the Authority's website ([www.isa.org.jm](http://www.isa.org.jm)) and the full proceedings of the workshop will be published in due course.
3. In view of the increasing commercial interest in the resources of the Area, participants in the workshop recognized the need for a classification system for the mineral resources of the Area. They considered that existing resource and reserve classification systems designed for land-based minerals would provide a useful basis for a system to enable contractors with the Authority to standardize the classification of and reporting on polymetallic nodule resources into proven, probable and possible reserves of metals.
4. Participants reviewed the international reporting template of the Committee for Mineral Reserves International Reporting Standards and clarified the concept of "mineable areas", noting that resources of the mineable area corresponded to the "mineral resources" category of the template, including inferred, indicated and



measured categories. It was also noted that the terms "proven, probable and possible reserves" corresponded to the template categories of measured, indicated and inferred mineral resources and, if the pre-feasibility or feasibility studies supporting the conversion of resources to reserves had been applied by the contractor, to proven and probable reserves. Materials that did not qualify as mineral reserves or resources under the Committee for Mineral Reserves International Reporting Standards might be classified within appropriate categories of the United Nations Framework Classification. Participants noted that, in the application of the modifying factors listed in the template, the categories of weather, transportation, underwater topography and international benefit-sharing should be considered.

5. From the practice of the current contractors in the exploration for polymetallic nodules, participants noted that most contractors were already following existing classifications, whether that of the Committee for Mineral Reserves International Reporting Standards, the United Nations Framework Classification or other national systems (such as the Canadian National Instrument 43-101, the Russian system or the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves). It was also noted that contractors would be ready to use the resource classification system recommended by the Authority in the context of their contractually mandated reports to the Authority. As a result, participants in the workshop recommended that contractors use the standards of the Committee for Mineral Reserves International Reporting Standards for resource classification, as modified by the Committee to reflect the different resources, for reporting on seabed mineral resources and reserves. Participants also recommended that such guidelines not refer to cut-off values, as they would depend on geological, technological and economic factors that should be defined by the contractors.

6. On the basis of the classification systems for land-based mineral resources, it was concluded that, at present, no contractor had identified reserves of the metals of interest in polymetallic nodules, particularly in the light of the fact that no tests of the collector device for mining the nodules had been conducted at the depths of the deposits. It was recommended that the Authority support collaboration among contractors to test their collector devices and to conduct pilot mining tests and environmental impact assessments. It was noted that this would help to reduce costs and risks to each contractor and to move polymetallic nodule resources from inferred resources to reserves of the metals of interest. As a follow-up to the workshop, each contractor was requested, on a voluntary basis, to complete and return a collector survey to the secretariat.

#### **Recommendations**

7. The Commission is invited to take note of the outcomes of the workshop and to provide such advice and direction as may be deemed appropriate. The Commission is also invited to consider recommending that contractors use standards of the Committee for Mineral Reserves International Reporting Standards, as modified by the Committee to take into account the different resources, for reporting on seabed mineral resources and reserves. Such a recommendation could be made in the form of a recommendation for the guidance of contractors, pursuant to regulation 39 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, or as an annotation to the standard template for annual reporting adopted by the Commission.